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Jenkins & Gilchrist, P.C.
Suite 3200
1445 Ross Avenue
Dallas, TX 75202-2499

EXAMINER	
DEAN, RAYMOND S	
ART UNIT	PAPER NUMBER
2684	

DATE MAILED: 11/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/874,579

Applicant(s)

HELLMARK ET AL.

Examiner

Raymond S Dean

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>031102,050704</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed July 9, 2004 regarding Claims 1, 4, 7 – 10, 13, 16 – 19, 22, and 25 - 27 have been fully considered but they are not persuasive.

Regarding Claim 1, Derryberry teaches transmitting at least one second access channel probe for a second message from the mobile station to the base station (Column 1 lines 54 – 65, Column 9 lines 31 - 41, when the mobile station wants to access it's serving base station an access probe will be transmitted, said mobile station can access said serving base station any number of times which means that there will be more than one access probe), the transmission power level of an initial access channel probe of the at least one second access channel probe for the second message being based upon the first transmission power level (Column 1 lines 54 – 65, Column 2 lines 26 – 34, Column 9 lines 31 – 55, Column 11 lines 6 – 10, the initial access probe power level will be the same as or a small multiple of the transmission power level established in the first access when the user of said mobile station is in the same position as in the first access and there is very minimal change in the radio environment, since the said initial power level is based on said multiple of the transmission power level of the first access said initial power level can only occur if said first access transmission power level is known).

Regarding Claim 10, Derryberry teaches at least one processor for determining a second transmission power level of an initial access channel probe of at least one

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second access channel probe for a second message to be transmitted from the mobile station to the base station (Figure 2, Column 1 lines 54 – 65, Column 2 lines 26 – 34, Column 9 lines 31 – 55, Column 11 lines 6 – 10, the control processor generates control signals so that an initial access probe is transmitted, said access probe will have a power level, when the mobile station wants to access it's serving base station an access probe will be transmitted, said mobile station can access said serving base station any number of times which means that there will be more than one access probe), the second transmission power level of the initial access channel probe of the at least one second access channel probe for the second message being determined based upon first transmission power level (Column 1 lines 54 – 65, Column 2 lines 26 – 34, Column 9 lines 31 – 55, Column 11 lines 6 – 10, the initial access probe power level will be the same as or a small multiple of the transmission power level established in the first access when the user of said mobile station is in the same position as in the first access and there is very minimal change in the radio environment, since the said initial power level is based on said multiple of the transmission power level of the first access said initial power level can only occur if said first access transmission power level is known).

Regarding Claim 19, Derryberry teaches storing a first transmission power level at the mobile station (Figure 2, Column 7 lines 37 – 40, the transmission power controller sets the initial power level and adjusts said power level based on power control commands, in order for said initial power level to be set consistently there will be a storage of said initial power level); and transmit at least one second access channel probe for a second message from the mobile station to the base station (Column 1 lines

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54 – 65, Column 9 lines 31 - 41, when the mobile station wants to access it's serving base station an access probe will be transmitted, said mobile station can access said serving base station any number of times which means that there will be more than one access probe), the transmission power level of an initial access channel probe of the at least one second access channel probe for the second message being based upon the first transmission power level (Column 1 lines 54 – 65, Column 2 lines 26 – 34, Column 9 lines 31 – 55, Column 11 lines 6 – 10, the initial access probe power level will be the same as or a small multiple of the transmission power level established in the first access when the user of said mobile station is in the same position as in the first access and there is very minimal change in the radio environment, since the said initial power level is based on said multiple of the transmission power level of the first access said initial power level can only occur if said first access transmission power level is known).

2. Applicant's arguments filed July 9, 2004 regarding Claims 2 – 3, 5 – 6, 11 – 12, 14 – 15, 20 – 21, and 23 – 24 have been fully considered but they are not persuasive.

Regarding Claim 2, Gilhousen teaches a recently measured received code power from the base station at the mobile station (Column 5 lines 45 – 47, the pilot signal power is the code power).

Derryberry and Gilhousen both teach a CDMA system with a mobile station in communication with a base station thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the measured code power taught in Gilhousen in the mobile station of Derryberry for the purpose of controlling the

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transmitter power of said mobile station so as to overcome deleterious fading without causing unnecessary system interference which can adversely affect overall system capacity as taught by Gilhousen.

Regarding Claim 3, Gilhousen teaches a recently measured base station interference level at the mobile station (Column 5 lines 40 – 68, the path loss estimate in conjunction with the non-linear filter prevents the mobile station from sudden increases in transmit power, which will cause interference at the base station thus said path loss estimate in conjunction with said non-linear filter takes into account said interference thus there will be measurement of said base station interference).

Derryberry and Gilhousen both teach a CDMA system with a mobile station in communication with a base station thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the measured base station interference taught in Gilhousen in the mobile station of Derryberry for the purpose of controlling the transmitter power of said mobile station so as to overcome deleterious fading without causing unnecessary system interference which can adversely affect overall system capacity as taught by Gilhousen.

Regarding Claim 5, Gilhousen teaches a path loss between the mobile station and the base station (Column 5 lines 40 – 42).

Derryberry and Gilhousen both teach a CDMA system with a mobile station in communication with a base station thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the path loss taught in Gilhousen in the mobile station of Derryberry for the purpose of controlling the

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transmitter power of said mobile station so as to overcome deleterious fading without causing unnecessary system interference which can adversely affect overall system capacity as taught by Gilhousen.

Regarding Claim 11, Gilhousen teaches a recently measured received code power from the base station (Column 5 lines 45 – 47, the pilot signal power is the code power).

Derryberry and Gilhousen both teach a CDMA system with a mobile station in communication with a base station thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the measured code power taught in Gilhousen in the mobile station of Derryberry for the purpose of controlling the transmitter power of said mobile station so as to overcome deleterious fading without causing unnecessary system interference which can adversely affect overall system capacity as taught by Gilhousen.

Regarding Claim 12, Gilhousen teaches a recently measured base station interference level (Column 5 lines 40 – 68, the path loss estimate in conjunction with the non-linear filter prevents the mobile station from sudden increases in transmit power, which will cause interference at the base station thus said path loss estimate in conjunction with said non-linear filter takes into account said interference thus there will be a measurement of said base station interference).

Derryberry and Gilhousen both teach a CDMA system with a mobile station in communication with a base station thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the measured base station

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interference taught in Gilhousen in the mobile station of Derryberry for the purpose of controlling the transmitter power of said mobile station so as to overcome deleterious fading without causing unnecessary system interference which can adversely affect overall system capacity as taught by Gilhousen.

Regarding Claim 14, Gilhousen teaches a path loss between the mobile station and the base station (Column 5 lines 40 – 42).

Derryberry and Gilhousen both teach a CDMA system with a mobile station in communication with a base station thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the path loss taught in Gilhousen in the mobile station of Derryberry for the purpose of controlling the transmitter power of said mobile station so as to overcome deleterious fading without causing unnecessary system interference which can adversely affect overall system capacity as taught by Gilhousen.

Regarding Claim 20, Gilhousen teaches a recently measured received code power from the base station at the mobile station (Column 5 lines 45 – 47, the pilot signal power is the code power).

Derryberry and Gilhousen both teach a CDMA system with a mobile station in communication with a base station thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the measured code power taught in Gilhousen in the mobile station of Derryberry for the purpose of controlling the transmitter power of said mobile station so as to overcome deleterious fading without

causing unnecessary system interference which can adversely affect overall system capacity as taught by Gilhousen.

Regarding Claim 21, Gilhousen teaches a recently measured base station interference level at the mobile station (Column 5 lines 40 – 68, the path loss estimate in conjunction with the non-linear filter prevents the mobile station from sudden increases in transmit power, which will cause interference at the base station thus said path loss estimate in conjunction with said non-linear filter takes into account said interference and thus there will be a measurement of said base station interference).

Derryberry and Gilhousen both teach a CDMA system with a mobile station in communication with a base station thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the measured base station interference taught in Gilhousen in the mobile station of Derryberry for the purpose of controlling the transmitter power of said mobile station so as to overcome deleterious fading without causing unnecessary system interference which can adversely affect overall system capacity as taught by Gilhousen.

Regarding Claim 23, Gilhousen teaches a path loss between the mobile station and the base station (Column 5 lines 40 – 42).

Derryberry and Gilhousen both teach a CDMA system with a mobile station in communication with a base station thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the path loss taught in Gilhousen in the mobile station of Derryberry for the purpose of controlling the transmitter power of said mobile station so as to overcome deleterious fading without

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causing unnecessary system interference which can adversely affect overall system capacity as taught by Gilhousen.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 4, 7 – 10, 13, 16 – 19, 22, and 25 – 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Derryberry et al. (US 6,498,785 B1).

Regarding Claim 1, Derryberry teaches a method for improving open loop power control in spread spectrum telecommunications systems, the method comprising the steps of: transmitting at least one first access channel probe for a first message from a mobile station to a base station (Column 1 lines 54 – 65, Column 9 lines 31 – 41), the transmission power level of each access channel probe in the at least one first access channel probe being increased until a base station acknowledgment is received for a specific access channel probe of the at least one first access channel probe at a first transmission power level (Column 1 lines 54 – 65, Column 2 lines 26 – 34, Column 9 lines 31 – 55, Column 11 lines 6 - 10); storing the first transmission power level at the

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mobile station (Figure 2, Column 7 lines 37 – 40, the transmission power controller sets the power level, which means that it must know the power level at all times thus there is an inherent storage of said power level in said transmission power controller); and transmitting at least one second access channel probe for a second message from the mobile station to the base station (Column 1 lines 54 – 65, Column 9 lines 31 - 41, whenever the mobile station is activated there will be an access probe to gain access to the serving base station, the user of said mobile station can activate said mobile station any number of times which means that there will be more than one access probe), the transmission power level of an initial access channel probe of the at least one second access channel probe for the second message being based upon the first transmission power level (Column 1 lines 54 – 65, Column 2 lines 26 – 34, Column 9 lines 31 – 55, Column 11 lines 6 – 10, when the mobile station is activated for the second time the transmission power level of the initial access probe will be the same or very close to the transmission power level established in the first access if the user of said mobile station is in the same position as in the first access and there is very minimal change in the radio environment thus this is an inherent characteristic).

Regarding Claim 4, Derryberry teaches all of the claimed limitations recited in Claim 1. Derryberry further teaches wherein the first message is a first packet and the second message is a second packet in a packet mode transmission (Column 9 lines 50 – 52, the fact that the data is transmitted in frames means that the transmitted data will be segmented into packets thus this is an inherent characteristic).

Regarding Claim 7, Derryberry teaches all of the claimed limitations recited in Claim 1. Derryberry further teaches wherein the transmission power level of the initial access channel probe of the at least one second access channel probe for the second message is closer to the first transmission power level than a transmission power level of an initial access channel probe of the at least one first access channel probe for the first message (Column 1 lines 54 – 65, Column 2 lines 26 – 34, Column 9 lines 31 – 55, Column 11 lines 6 – 10, the fact that there are electronic circuits involved in transmitting the signal from the mobile station means that the actual transmitted power from said mobile station will vary from the power level determined from the open loop power control process, this means that the power level of the second access probe can be closer to said determined power level due to the nature of the electronics).

Regarding Claim 8, Derryberry teaches all of the claimed limitations recited in Claim 1. Derryberry further teaches wherein the transmission power level of the initial access channel probe of the at least one second access channel probe for the second message is closer to a transmission power level that is required to have the initial access channel probe reach the base station than a transmission power level of an initial access channel probe of the at least one first access channel probe for the first message (Column 1 lines 54 – 65, Column 2 lines 26 – 34, Column 9 lines 31 – 55, Column 11 lines 6 – 10, the fact that there are electronic circuits involved in transmitting the signal from the mobile station means that the actual transmitted power from said mobile station will vary from the power level determined from the open loop power

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control process, this means that the power level of the second access probe can be closer to said determined power level due to the nature of the electronics).

Regarding Claim 9, Derryberry teaches all of the claimed limitations recited in Claim 1. Derryberry further teaches wherein the transmission power level of the second message is at or slightly above a transmission power level that is required to have the second message reach the base station (Column 1 lines 54 – 65, Column 2 lines 26 – 34, Column 9 lines 31 – 55, Column 11 lines 6 – 10, when the mobile user activates the mobile station a second time there will be an open loop power control process through which a second transmission power level will be determined, the actual transmit power of said mobile station will vary from said determined power level due to the nature of the electronic circuits thus said actual transmit power can be at or slightly above said determined power level).

Regarding Claim 10, Derryberry teaches an apparatus for improving open loop power control in spread spectrum telecommunications systems, the apparatus comprising: at least one memory for storing a first transmission power level of a specific access channel probe of at least one first access channel probe for a first message transmitted from a mobile station to a base station (Figure 2, Column 1 lines 54 – 65, Column 2 lines 26 – 34, Column 9 lines 31 – 55, Column 11 lines 6 – 10, Column 7 lines 37 – 40, the transmission power controller sets the power level, which means that it must know the power level at all times thus there is an inherent storage of said power level in said transmission power controller and thus an inherent memory), the specific access channel probe of the at least one first access channel probe being the first

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access channel probe to receive an acknowledgment from the base station (Column 1 lines 54 – 65, Column 9 lines 31 – 41); and at least one processor for determining a second transmission power level of an initial access channel probe of at least one second access channel probe for a second message to be transmitted from the mobile station to the base station (Figure 2, Column 1 lines 54 – 65, Column 2 lines 26 – 34, Column 9 lines 31 – 55, Column 11 lines 6 – 10, whenever the mobile station is activated there will be an access probe to gain access to the serving base station, the user of said mobile station can activate said mobile stations any number of times which means that there will be more than one access probe), the second transmission power level of the initial access channel probe of the at least one second access channel probe for the second message being determined based upon first transmission power level (Column 1 lines 54 – 65, Column 2 lines 26 – 34, Column 9 lines 31 – 55, Column 11 lines 6 – 10, when the mobile station is activated for the second time the transmission power level of the initial access probe will be the same or very close to the transmission power level established in the first access if the user of said mobile station is in the same position as in the first access and there is very minimal change in the radio environment thus this is an inherent characteristic).

Regarding Claim 13, Derryberry teaches all of the claimed limitations recited in Claim 10. Derryberry further teaches wherein the first message is a first packet and the second message is a second packet in a packet mode transmission (Column 9 lines 50 – 52, the fact that the data is transmitted in frames means that the transmitted data will be segmented into packets thus this is an inherent characteristic).

Regarding Claim 16, Derryberry teaches all of the claimed limitations recited in Claim 10. Derryberry further teaches wherein the second transmission power level of the initial access channel probe of the at least one second access probe for the second message is closer to the first transmission power level than a transmission power level of an initial access channel probe of the at least one first access channel probe for the first message (Column 1 lines 54 – 65, Column 2 lines 26 – 34, Column 9 lines 31 – 55, Column 11 lines 6 – 10, the fact that there are electronic circuits involved in transmitting the signal from the mobile station means that the actual transmitted power from said mobile station will vary from the power level determined from the open loop power control process, this means that the power level of the second access probe can be closer to said determined power level due to the nature of the electronics).

Regarding Claim 17, Derryberry teaches all of the claimed limitations recited in Claim 10. Derryberry further teaches wherein the second transmission power level of the initial access channel probe of the at least one second access channel probe for the second message is closer to a transmission power level that is required to have the initial access channel probe reach the base station than a transmission power level of an initial access channel probe of the at least one first access channel probe for the first message (Column 1 lines 54 – 65, Column 2 lines 26 – 34, Column 9 lines 31 – 55, Column 11 lines 6 – 10, the fact that there are electronic circuits involved in transmitting the signal from the mobile station means that the actual transmitted power from said mobile station will vary from the power level determined from the open loop power

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control process, this means that the power level of the second access probe can be closer to said determined power level due to the nature of the electronics).

Regarding Claim 18, Derryberry teaches all of the claimed limitations recited in Claim 10. Derryberry further teaches wherein the second transmission power level of the initial access channel probe of the at least one second access channel probe for the second message is at or slightly above a transmission power level that is required to have the initial access channel probe reach the base station (Column 1 lines 54 – 65, Column 2 lines 26 – 34, Column 9 lines 31 – 55, Column 11 lines 6 – 10, when the mobile user activates the mobile station a second time there will be an open loop power control process through which a second transmission power level will be determined, the actual transmit power of said mobile station will vary from said determined power level due to the nature of the electronic circuits thus said actual transmit power can be at or slightly above said determined power level).

Regarding Claim 19, Derryberry teaches an article of manufacture for improving open loop power control in spread spectrum telecommunications systems, the article of manufacture comprising: at least one processor readable carrier; and instructions carried on the at least one carrier; wherein the instructions are configured to be readable from the at least one carrier (Column 1 lines 54 – 65, Column 2 lines 26 – 34, Column 9 lines 31 – 55, Column 11 lines 6 – 10, the mobile station receives instructions to access the network when the user of said mobile station pushes the power button to activate said mobile station, the processor readable carrier is the signal generated when the mobile station is activated, said signal instructs said mobile station to enter the open

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loop power control process and transmit access probes) by at least one processor and thereby cause the at least one processor to operate so as to: transmit at least one first access channel probe for a first message from a mobile station to a base station (Figure 2, Column 1 lines 54 – 65, Column 9 lines 31 – 41), the transmission power level of each access channel probe in the at least one first access channel probe being increased until a base station acknowledgment is received for a specific access channel probe of the at least one first access channel probe at a first transmission power level (Column 1 lines 54 – 65, Column 2 lines 26 – 34, Column 9 lines 31 – 55, Column 11 lines 6 - 10); store the first transmission power level at the mobile station (Figure 2, Column 7 lines 37 – 40, the transmission power controller sets the power level , which means that it must know the power level at all times thus there is an inherent storage of said power level in said transmission power controller); and transmit at least one second access channel probe for a second message from the mobile station to the base station (Column 1 lines 54 – 65, Column 9 lines 31 - 41, whenever the mobile station is activated there will be an access probe to gain access to the serving base station, the user of said mobile station can activate said mobile station any number of times which means that there will be more than one access probe), the transmission power level of an initial access channel probe of the at least one second access channel probe for the second message being based upon the first transmission power level (Column 1 lines 54 – 65, Column 2 lines 26 – 34, Column 9 lines 31 – 55, Column 11 lines 6 – 10, when the mobile station is activated for the second time the transmission power level of the initial access probe will be the same or very close to the transmission power level

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established in the first access if the user of said mobile station is in the same position as in the first access and there is very minimal change in the radio environment thus this is an inherent characteristic).

Regarding Claim 22, Derryberry teaches all of the claimed limitations recited in Claim 19. Derryberry further teaches wherein the first message is a first packet and the second message is a second packet in a packet mode transmission (Column 9 lines 50 – 52, the fact that the data is transmitted in frames means that the transmitted data will be segmented into packets thus this is an inherent characteristic).

Regarding Claim 25, Derryberry teaches all of the claimed limitations recited in Claim 19. Derryberry further teaches wherein the transmission power level of the initial access channel probe of the at least one second access channel probe for the second message is closer to the first transmission power level than a transmission power level of an initial access channel probe of the at least one first access channel probe for the first message (Column 1 lines 54 – 65, Column 2 lines 26 – 34, Column 9 lines 31 – 55, Column 11 lines 6 – 10, the fact that there are electronic circuits involved in transmitting the signal from the mobile station means that the actual transmitted power from said mobile station will vary from the power level determined from the open loop power control process, this means that the power level of the second access probe can be closer to said determined power level due to the nature of the electronics).

Regarding Claim 26, Derryberry teaches all of the claimed limitations recited in Claim 19. Derryberry further teaches wherein the transmission power level of the initial access channel probe of the at least one second access channel probe for the second

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message is closer to a transmission power level that is required to have the initial access channel probe reach the base station than a transmission power level of an initial access channel probe of the at least one first access channel probe for the first message (Column 1 lines 54 – 65, Column 2 lines 26 – 34, Column 9 lines 31 – 55, Column 11 lines 6 – 10, the fact that there are electronic circuits involved in transmitting the signal from the mobile station means that the actual transmitted power from said mobile station will vary from the power level determined from the open loop power control process, this means that the power level of the second access probe can be closer to said determined power level due to the nature of the electronics).

Regarding Claim 27, Derryberry teaches all of the claimed limitations recited in Claim 19. Derryberry further teaches wherein the transmission power level of the initial access channel probe of the at least one second access channel probe for the second message is at or slightly above a transmission power level that is required to have the initial access channel probe reach the base station (Column 1 lines 54 – 65, Column 2 lines 26 – 34, Column 9 lines 31 – 55, Column 11 lines 6 – 10, when the mobile user activates the mobile station a second time there will be an open loop power control process through which a second transmission power level will be determined, the actual transmit power of said mobile station will vary from said determined power level due to the nature of the electronic circuits thus said actual transmit power can be at or slightly above said determined power level).

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5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2 – 3, 5 – 6, 11 – 12, 14 – 15, 20 – 21, and 23 – 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Derryberry et al. (US 6,498,785 B1) in view of Gilhousen et al. (5,265,119).

Regarding Claim 2, Derryberry teaches all of the claimed limitations recited in Claim 1. Derryberry does not teach a recently measured received code power from the base station at the mobile station.

Gilhousen teaches a recently measured received code power from the base station at the mobile station (Column 5 lines 45 – 47, the pilot signal power is the code power).

Derryberry and Gilhousen both teach a CDMA system with a mobile station in communication with a base station thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the measured code power taught in Gilhousen in the mobile station of Derryberry for the purpose of controlling the transmitter power of said mobile station so as to overcome deleterious fading without causing unnecessary system interference which can adversely affect overall system capacity.

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Regarding Claim 3, Derryberry teaches all of the claimed limitations recited in Claim 1. Derryberry does not teach a recently measured base station interference level at the mobile station.

Gilhousen teaches a recently measured base station interference level at the mobile station (Column 5 lines 40 – 68, the path loss estimate in conjunction with the non-linear filter prevents the mobile station from sudden increases in transmit power, which will cause interference at the base station thus said path loss estimate in conjunction with said non-linear filter take into account said interference and thus there is an inherent measurement of said base station interference).

Derryberry and Gilhousen both teach a CDMA system with a mobile station in communication with a base station thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the measured base station interference taught in Gilhousen in the mobile station of Derryberry for the purpose of controlling the transmitter power of said mobile station so as to overcome deleterious fading without causing unnecessary system interference which can adversely affect overall system capacity.

Regarding Claim 5, Derryberry teaches all of the claimed limitations recited in Claim 1. Derryberry does not teach a path loss between the mobile station and the base station.

Gilhousen teaches a path loss between the mobile station and the base station (Column 5 lines 40 – 42).

Derryberry and Gilhousen both teach a CDMA system with a mobile station in communication with a base station thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the path loss taught in Gilhousen in the mobile station of Derryberry for the purpose of controlling the transmitter power of said mobile station so as to overcome deleterious fading without causing unnecessary system interference which can adversely affect overall system capacity.

Regarding Claim 6, Derryberry in view Gilhousen teaches all of the claimed limitations recited in Claim 5. Gilhousen further teaches a base station interference level (Column 5 lines 62 – 68).

Regarding Claim 11, Derryberry teaches all of the claimed limitations recited in Claim 10. Derryberry does not teach a recently measured received code power from the base station.

Gilhousen teaches a recently measured received code power from the base station (Column 5 lines 45 – 47, the pilot signal power is the code power).

Derryberry and Gilhousen both teach a CDMA system with a mobile station in communication with a base station thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the measured code power taught in Gilhousen in the mobile station of Derryberry for the purpose of controlling the transmitter power of said mobile station so as to overcome deleterious fading without causing unnecessary system interference which can adversely affect overall system capacity.

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Regarding Claim 12, Derryberry teaches all of the claimed limitations recited in Claim 10. Derryberry does not teach a recently measured base station interference level.

Gilhousen teaches a recently measured base station interference level (Column 5 lines 40 – 68, the path loss estimate in conjunction with the non-linear filter prevents the mobile station from sudden increases in transmit power, which will cause interference at the base station thus said path loss estimate in conjunction with said non-linear filter take into account said interference and thus there is an inherent measurement of said base station interference).

Derryberry and Gilhousen both teach a CDMA system with a mobile station in communication with a base station thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the measured base station interference taught in Gilhousen in the mobile station of Derryberry for the purpose of controlling the transmitter power of said mobile station so as to overcome deleterious fading without causing unnecessary system interference which can adversely affect overall system capacity.

Regarding Claim 14, Derryberry teaches all of the claimed limitations recited in Claim 10. Derryberry does not teach a path loss between the mobile station and the base station.

Gilhousen teaches a path loss between the mobile station and the base station (Column 5 lines 40 – 42).

Derryberry and Gilhousen both teach a CDMA system with a mobile station in communication with a base station thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the path loss taught in Gilhousen in the mobile station of Derryberry for the purpose of controlling the transmitter power of said mobile station so as to overcome deleterious fading without causing unnecessary system interference which can adversely affect overall system capacity.

Regarding Claim 15, Derryberry in view of Gilhousen teaches all of the claimed limitations recited in Claim 14. Gilhousen further teaches a base station interference level (Column 5 lines 62 – 68).

Regarding Claim 20, Derryberry teaches all of the claimed limitations recited in Claim 19. Derryberry does not teach a recently measured received code power from the base station at the mobile station.

Gilhousen teaches a recently measured received code power from the base station at the mobile station (Column 5 lines 45 – 47, the pilot signal power is the code power).

Derryberry and Gilhousen both teach a CDMA system with a mobile station in communication with a base station thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the measured code power taught in Gilhousen in the mobile station of Derryberry for the purpose of controlling the transmitter power of said mobile station so as to overcome deleterious fading without

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causing unnecessary system interference which can adversely affect overall system capacity.

Regarding Claim 21, Derryberry teaches all of the claimed limitations recited in Claim 19. . Derryberry does not teach a recently measured base station interference level at the mobile station.

Gilhousen teaches a recently measured base station interference level at the mobile station (Column 5 lines 40 – 68, the path loss estimate in conjunction with the non-linear filter prevents the mobile station from sudden increases in transmit power, which will cause interference at the base station thus said path loss estimate in conjunction with said non-linear filter take into account said interference and thus there is an inherent measurement of said base station interference).

Derryberry and Gilhousen both teach a CDMA system with a mobile station in communication with a base station thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the measured base station interference taught in Gilhousen in the mobile station of Derryberry for the purpose of controlling the transmitter power of said mobile station so as to overcome deleterious fading without causing unnecessary system interference which can adversely affect overall system capacity.

Regarding Claim 23, Derryberry teaches all of the claimed limitations recited in Claim 19. Derryberry does not teach a path loss between the mobile station and the base station.

Gilhousen teaches a path loss between the mobile station and the base station (Column 5 lines 40 – 42).

Derryberry and Gilhousen both teach a CDMA system with a mobile station in communication with a base station thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the path loss taught in Gilhousen in the mobile station of Derryberry for the purpose of controlling the transmitter power of said mobile station so as to overcome deleterious fading without causing unnecessary system interference which can adversely affect overall system capacity.

Regarding Claim 24, Derryberry in view of Gilhousen teaches all of the claimed limitations recited in Claim 23. Gilhousen further teaches a base station interference level (Column 5 lines 62 – 68).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

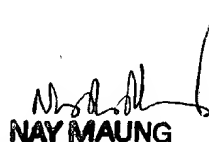
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond S Dean whose telephone number is 703-305-8998. The examiner can normally be reached on 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay A Maung can be reached on 703-308-7745. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Raymond S. Dean
November 10, 2004


NAY MAUNG

SUPERVISORY PATENT EXAMINER